

ABSTRACT OF THE DISCLOSURE

- A ceramic article is disclosed which contains aluminum, silicon, and titanium in a total amount of at least 99 % by weight as reduced to the oxides ($\text{Al}_2\text{O}_3 + \text{SiO}_2 + \text{TiO}_2$) and assumes an acidic color in methyl red, an indicator of at least $\text{pK}_a + 4.8$. It can be used as a carrier for a catalyst. This ceramic article is obtained by mixing an aluminum compound, a silicon compound, and a titanium compound and calcining the resultant mixture at a temperature in the range of $1,000^\circ - 2,000^\circ\text{C}$.
- 5 A catalyst for preparing ethylene oxide is obtained by depositing silver and a reaction promotor on the ceramic carrier and ethylene oxide is obtained by oxidizing ethylene with a molecular oxygen-containing gas in the presence of the catalyst in vapor phase.
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